

CLAIMS

1. A semiconductor integrated circuit (30) for use in
5 an audio-video device, arranged to produce audio-video
signals, comprising:
- an input interface (43) for receipt of a received
encrypted enable signal;
 - an output interface (45) for output of audio-video
10 signals;
 - one or more hardware circuit portions each arranged
to process data in relation to the audio-video signals;
 - a decryption circuit arranged to receive the
encrypted enable signal, and to decrypt the encrypted
15 enable signal, in accordance with a key to provide a plain
text message;
 - a store containing value for the circuit (30);
 - an enabling circuit arranged to selectively
restrict, deny or allow operation of at least one of the
20 one or more hardware circuit portions; and
 - a comparison circuit arranged to compare the plain
text message with the stored value and to selectively
instruct the enabling device if the plain text message and
stored value match.
- 25
2. A semiconductor integrated circuit according to
claim 1, wherein the enabling circuit comprises one or
more switch elements arranged to selectively interrupt a
data pathway to, from or within at least one of the one or
30 more of the hardware circuit portions.
3. A semiconductor integrated circuit according to
claim 2, wherein the data pathway is a critical data
pathway, whereby interruption of the pathway prevents
35 operation of the at least one of the one or more hardware
circuit portions.

4. A semiconductor integrated circuit according to claim 2, wherein the data pathway relates to a clock of one or more hardware circuit portions, whereby
5 interruption of the data pathway causes the clock to run slower than normal.

5. A semiconductor integrated circuit according to claim 4, wherein the one of the one or more hardware
10 circuit portions is the main CPU of the semiconductor integrated circuit.

6. A semiconductor integrated circuit according to claim 2 or 3, wherein the at least one of the one or more
15 hardware circuit portions is a display engine, whereby interruption of the data pathway causes the video signals at the output interface to be interrupted or impaired.

7. A semiconductor integrated circuit according to claim 2 or 3, wherein the at least one of the one or more
20 hardware circuit portions is a data port of the semiconductor integrated circuit, whereby interruption of the data pathway prevents operation of the data port.

8. A semiconductor integrated circuit according to any preceding claim, wherein the input interface is arranged
25 to receive the encrypted enable signal from a broadcast signal.

9. A semiconductor integrated circuit according to any preceding claim, wherein the input interface is arranged
30 to receive the encrypted enable signal from a manual user input.

10. A semiconductor integrated circuit according to any preceding claim, wherein the input interface is arranged
35

to receive the encrypted enable signal from another device.

5 11. A semiconductor integrated circuit according to any preceding claim, wherein the enabling circuit comprises a store arranged to store indications of which hardware circuit elements should be restricted, denied or allowed to operate.

10 12. A semiconductor integrated circuit according to claim 11, wherein the store comprises one or more hardware fuses.

15 13. A semiconductor integrated circuit according to claim 11, wherein the store comprises a non-volatile memory.

20 14. A semiconductor integrated circuit according to any preceding claim, wherein the enabling circuit is arranged to extract from the plain text message indications of which hardware circuit elements should be restricted, denied or allowed to operate.

25 15. A semiconductor integrated circuit according to any preceding claim, wherein the semiconductor integrated circuit is a monolithic circuit for decryption of broadcast audio-video signals.

30 16. A semiconductor integrated circuit according to claim 2 or 3, wherein the at least one of the one or more hardware circuit portions relates to storing audio-video signals to an external storage device, whereby the enabling circuit is arranged to selectively restrict, deny or allow storage of the audio-video signals produced by the circuit.

35

17. A semiconductor integrated circuit according to claim 2 or 3, wherein the circuit includes an input for receiving broadcast signals from a broadcast network from which the audio-video signals are produced, and wherein the at least one of the one or more hardware circuit portions relates to production of the audio-video signals, whereby the enabling circuit is arranged to selectively restrict, deny or allow production of the audio-video signals.

18. A television decoder comprising the semiconductor integrated circuit according to claim 15.

19. A method of providing an audio video device to a user the audio video device being of the type for manipulation and presentation of audio video content and comprising a plurality of hardware circuit portions on a monolithic semiconductor circuit, and an input interface, the method comprising:

- supplying the audio video device for an end user in a condition that one or more of the hardware circuit portions are inoperable or have reduced functionality;
- arranging a subscription agreement with the end user in which the user pays for ongoing functionality of the one or more hardware circuit portions; and
- providing an enable message in encrypted form for input to the input interface, the enable message instructing the monolithic semiconductor circuit to enable functionality of one of the one or more hardware circuit portions.

20. A method according to claim 19, wherein the audio-video device is a television decoder.

21. A method according to claim 20, wherein the enable message is broadcast to the audio-video device.

22. A method according to claim 20, wherein one of the plurality of hardware circuit portions is a cryptographic processor for decryption of television signals, the enable
5 message instructing the enablement of the cryptographic processor.

23. A method according to claim 20, wherein one of the plurality of hardware circuit portions is a data port, the
10 enable message instructing the connection or disconnection of the data port.